

TRANSPORTATION in the Information Age

The leadership & investment challenge



*"In today's economy, the
most important resource
is no longer labor, capital
or land; it is knowledge."*

— Peter Drucker

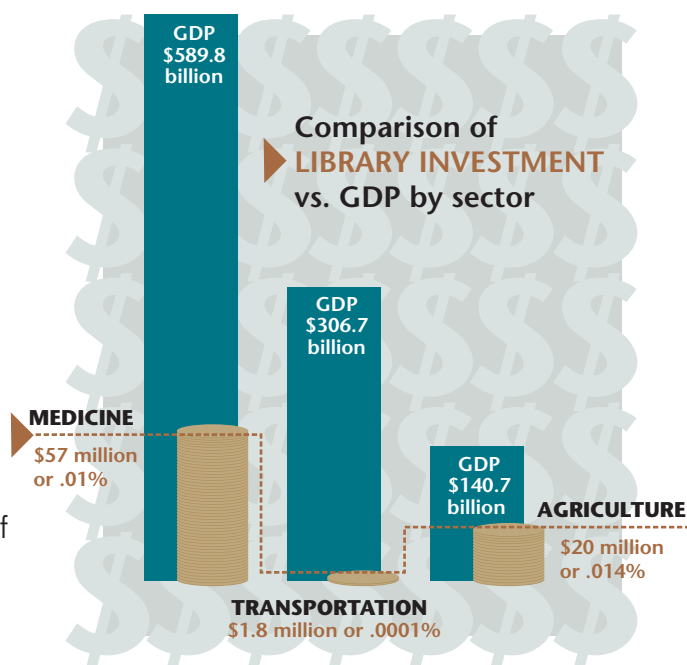


"A large portion of information resources needed by the nation's transportation policy makers and practitioners cannot be efficiently identified, located and retrieved when needed..."

— Jerry Baldwin
Director, Minnesota Department
of Transportation Library

Investment in transportation information lags behind

The Information Age presents critical leadership and investment challenges for transportation agencies. Although transportation as an industry contributes more than \$306 billion to the Gross Domestic Product (2001), it lags far behind comparable sectors like medicine and agriculture in terms of library and knowledge investments.



Transportation libraries are closing

Limited budgets are forcing transportation libraries to close. Remaining information centers are often under-funded and under-staffed. An FHWA report, "The Value of Information and Information Services," shows that agencies without libraries spend two to four times more to acquire information than those with in-house libraries.

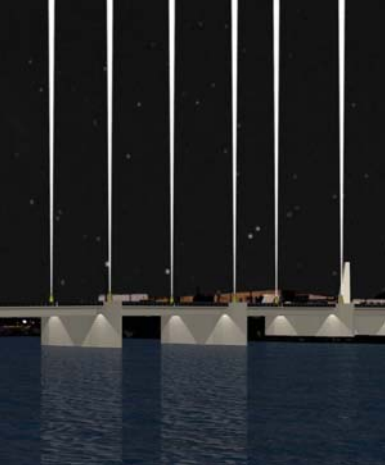
The Internet is transforming the library landscape and calls for skilled professionals to manage overload, and ensure quality and timely information delivery. A national study found that Internet information more than doubles every year. Further, by using on-line search engines like Google, the average practitioner accesses only one-third of available information.

Mission critical: managing information & knowledge

Today's approach to transportation information management is ad hoc and decentralized. To meet future demands transportation leaders will need to:

- Apply recent advances in communications technology
- Develop a comprehensive approach to information and knowledge management
- Commit sufficient funds for a national network
- Merge Internet capacity with the skill of library and information professionals





"Knowledge management is the process to create and share knowledge to optimize ... the attainment of the organization's mission and goals."

— Roberto Sarmiento
Director, Northwestern
University Transportation
Library

Linking strategic, workforce and operational solutions

Information and knowledge have become strategic organizational assets. The value of these assets can be measured in terms of efficiencies, time and money saved, better decisions, enhanced innovation and increased safety. Access to information from libraries, research programs, and technology transfer initiatives yields real benefits to transportation agencies and practitioners.

Information saves time and money

TLCat, a new transportation library catalog, allows users to search collections of 20 of the nation's top transportation libraries at one time. "The idea of creating a transportation resource like this has been discussed for many years. We're delighted to provide a robust resource to ensure access to the best information possible."

— Nelda Bravo, Director
National Transportation Library

New York State DOT estimates life-cycle cost savings of nearly \$9 million per year from implementing a new concrete mix for bridge decks that was developed as the result of a literature search.

— Value of Information & Information Services
FHWA-SA-99-038, October, 1998

Illinois DOT saved approximately \$300,000 through access to research at Louisiana State University on heat-strengthening of steel bridges.

— The Value of Information

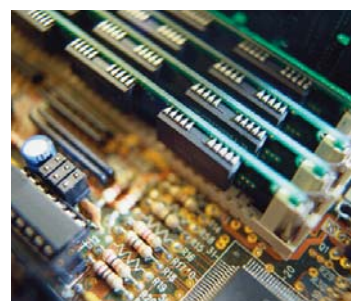
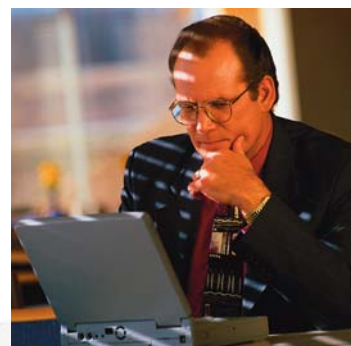
Transportation libraries are cost-effective

The Minnesota DOT Library estimates an annual benefit of \$1 million just from its interlibrary loan services. Value of all library services to MnDOT is \$7.6 million per year, with a benefit-to-cost ratio of 12 to 1.

— Minnesota Department of
Transportation Library
www.dot.state.mn.us/library/

In the private sector, Texas Instruments calculated a 515% return on investment in library services.

— destination KM.com, 2001

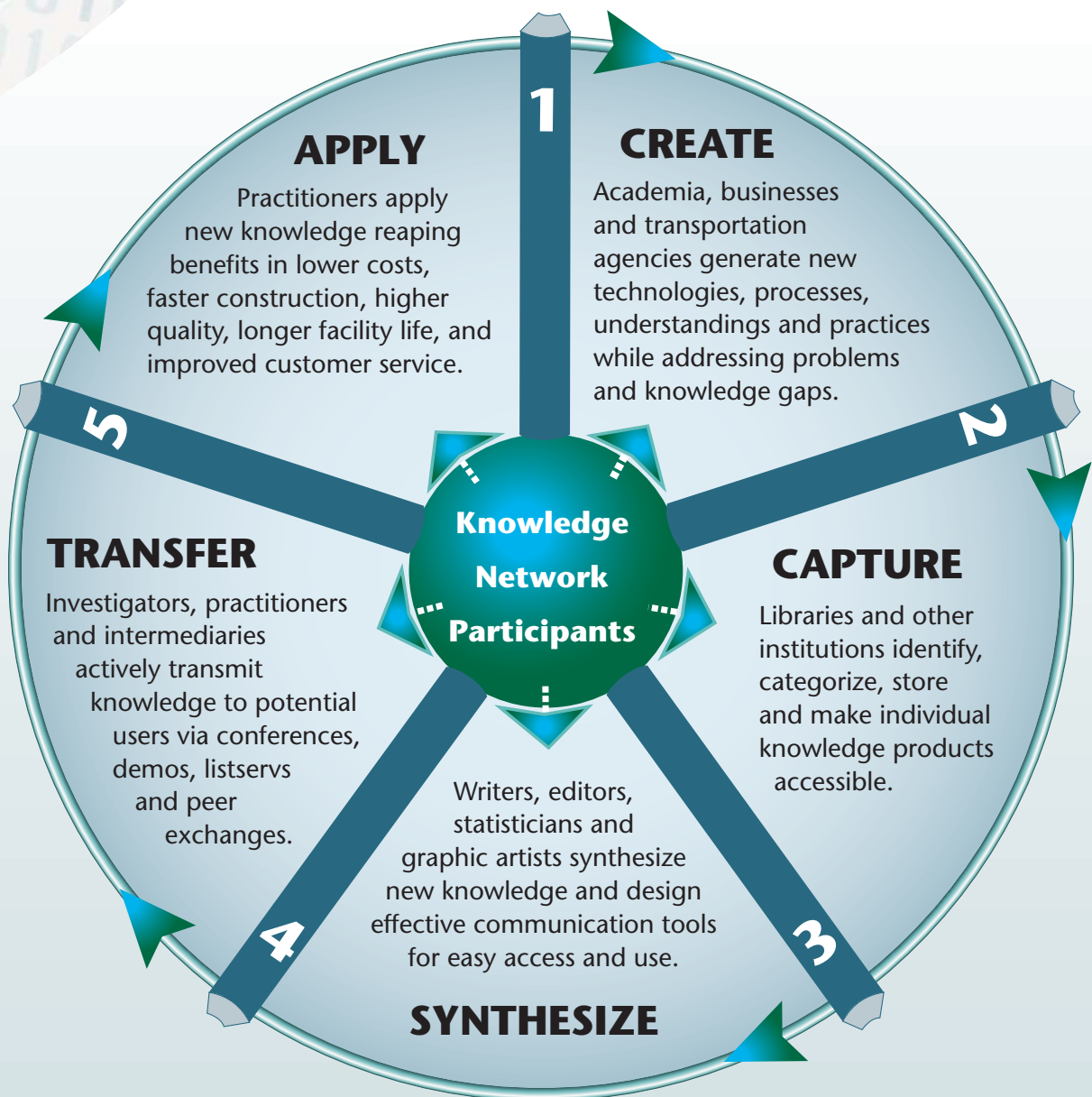




The transportation knowledge cycle— investing in core services

The human and technological advances of the last 20 years require the design, construction and preservation of a new information infrastructure. The sheer volume of available information can be overwhelming without a well-organized, sustained delivery mechanism.

Investing in the core services of the knowledge cycle will transform individual organizations and build a dynamic national network.





"To address today's transportation challenges, leaders need to develop, implement and fund a Transportation Knowledge Network."

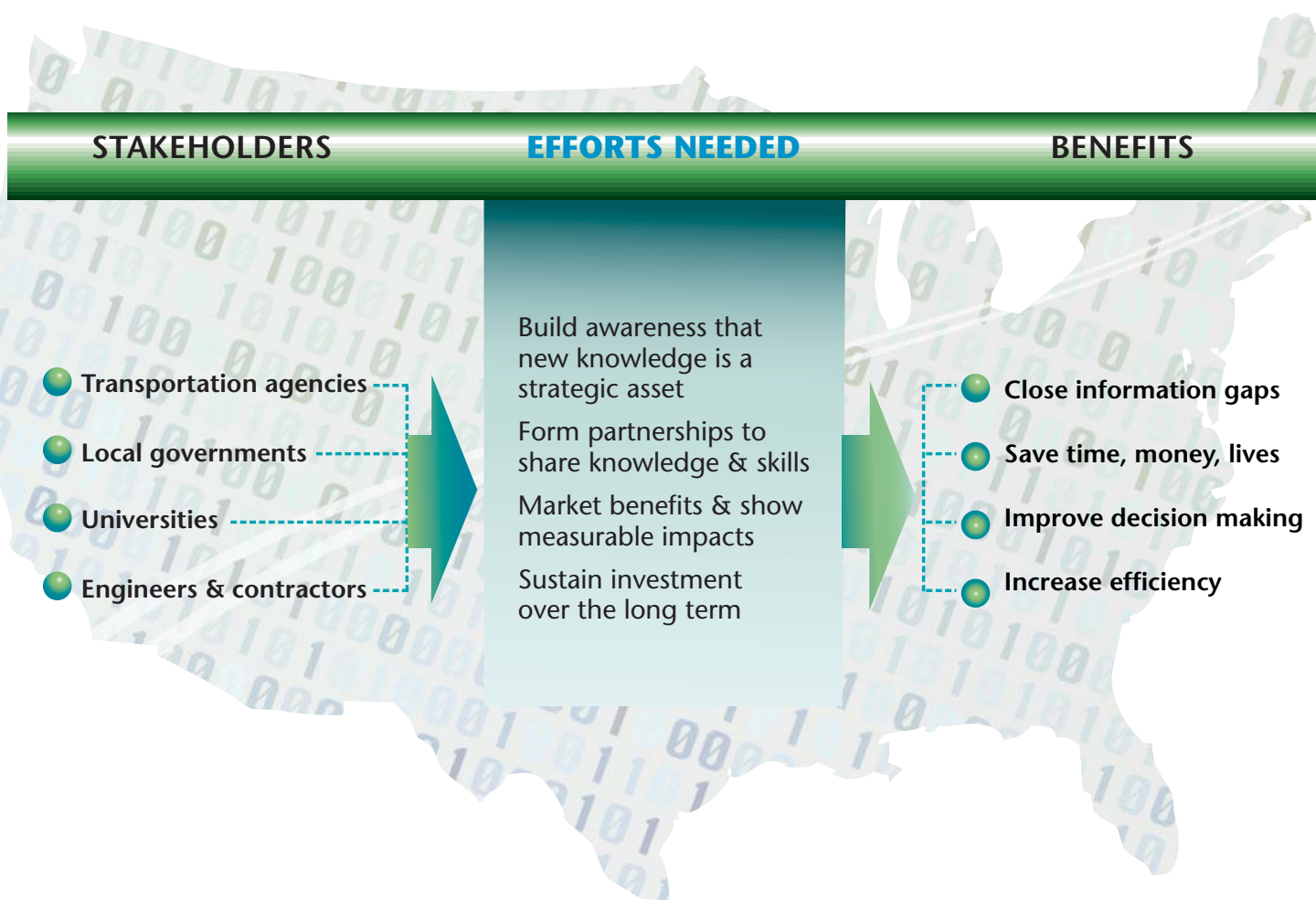
— Nina McLawhorn
Research Administrator,
Wisconsin Department
of Transportation

Call to Action

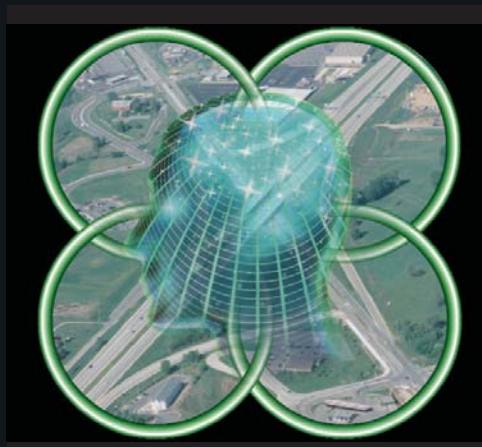
- Reauthorize and fund National Transportation Library
- Invest in state DOT libraries
- Join the library pooled fund study
- Complete national strategic framework for information management
- Educate CEOs, Congress, AASHTO, TRB, USDOT

Leadership challenges

Creating a national Transportation Knowledge Network requires imagination, planning and funding. It also depends on the support of transportation stakeholders and leadership from a coordinating body such as the National Transportation Library.



K N O W L E D G E N E T W O R K



A national Transportation Knowledge Network — TKN

Transportation agencies, local governments, universities, professional associations, and engineering and construction companies need to join together to create a dynamic new network for sharing transportation knowledge across the country.



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